

## **Media & Communication**

### **- Courses in English –**

- Data visualisation and storytelling
- International trends in communication studies

## Course Name: Data visualisation and storytelling

Degree programmes:

**Media and Communication (Bachelor)**

Responsible Lecturer: Prof. Dr.-Ing. Christoph Kinkeldey

**Workload:** 360 hours

**Lecture hours per week:** 4

**ECTS Credits:** 12

### Course objectives:

Students acquire basic skills for specialisation on data analysis for digital media. Using data and current software tools, students can develop visual narratives by

- applying methodological skills in media informatics to understand and design interactive applications and
- using current data visualisation and data storytelling methods to create journalistic products that are tailored to the target group,

so that from complex data, they can develop data journalistic projects for digital media in editorial teams.

### Contents:

#### Data visualisation & storytelling I:

Students learn to use media informatics, as an applied computer science, which focuses on computer systems for human communication, by:

- getting to know the basics of visual perception and human-machine interaction and
- understanding and being able to describe the complex interaction processes between man and machine.

The aim is that, with the help of methodological competencies of media informatics, they can understand and design complex interactive applications.

#### Data visualisation & storytelling II:

Students can identify, access, analyse, structure, interpret, process and visualise data by analysing larger amounts of data using current methods of data analysis, as well as selecting, adapting and using suitable data visualisation methods with the aim of making data sets accessible to target groups and to make them accessible through data storytelling. And then to use current data visualisation and data storytelling methods to create journalistic products that are tailored to the target group.

### About didactics and workload distribution:

360 hours of which 136 hours in-person lectures and 224 hours independent study. Self-study of specialised literature (inverted classroom), exercises with digital applications (tool training, peer learning), expert presentations, case studies.

### Requirements for participation:

- 

### Course language:

English

### Type of exam:

Term paper with final presentation (10-20 minutes). Other possible forms of examination: term paper, written examination and presentation. If there is more than one possible form of examination in the module, the form of examination to be taken will be announced by the responsible lecturer at the beginning of the course.

### Requirements for credit point allocation:

Successful completion of the term paper and presentation (or other form of examination – see above)

### Literature:

- Dix, Alan. *Human-computer interaction*. Pearson Education, 2003.
- Kirk, Andy. *Data visualisation: A handbook for data driven design*. Sage, 2016.
- Cairo, Alberto. *The truthful art: Data, charts, and maps for communication*. New Riders, 2016.
- Munzner, Tamara. *Visualization analysis and design*. CRC press, 2014.

<b>Course Name: International trends in communication studies</b>		
Degree programmes: <b>Media and Communication (Bachelor)</b>	Responsible Lecturer:	
<b>Workload:</b> 360 hours	<b>Lecture hours per week:</b> 4	<b>ECTS Credits:</b> 12
<p><b>Course objectives:</b></p> <p>Students analyse the global development of networked public spheres and their professional challenges, by</p> <p>a) understanding current international trends in media and communication research, and  b) categorising these in universal theories of social transformation processes,</p> <p>in order to be able to scientifically analyse basic norms, structures, content, communicators and audiences, media effects and media use in the network society.</p> <p>Students acquire basic competences for specialisation on international research trends in communication research.</p>		
<p><b>Contents:</b></p> <p><b>Communication studies I:</b></p> <p>Students have a basic knowledge of the theories and methods of communication science by</p> <ul style="list-style-type: none"> <li>- familiarising themselves with research topics relevant to media and communication from international specialist journals</li> <li>- and by analysing their theoretical references and methodological approaches,</li> </ul> <p>in order to understand current international trends in media and communication research</p> <p><b>Communication studies II:</b></p> <p>Students have in-depth basic knowledge of the theories and methods of communication science by being able to</p> <ul style="list-style-type: none"> <li>- systematically analyse normative, structural and content-related changes in the application fields of media and communication,</li> <li>- and understand the transformation of audiences under the changed framework conditions of media use and media effects in the network society,</li> </ul> <p>in order to categorise current developments in the research field of media and communication in social transformation processes with the help of universal theories.</p>		
<p><b>About didactics and workload distribution:</b></p> <p>360 hours of which 136 hours in-person lectures and 224 hours independent study. Self-study of specialised literature (inverted classroom), exercises with digital applications (tool training, peer learning), expert presentations, case studies.</p>		
<b>Requirements for participation:</b> -	<b>Course language:</b> English	
<b>Type of exam:</b> Written examination. Min. 90 minutes; max. 240 minutes		
<p><b>Requirements for credit point allocation:</b></p> <p>Successful completion of the term paper and presentation (or other form of examination – see above)</p>		
<p><b>Literature:</b></p> <ul style="list-style-type: none"> <li>- McQuail, Denis/Deuze, Mark: McQuail's Media and Mass Communication Theory. London: Sage, 2020</li> <li>- Becker, Jörg/Mansell, Robin (Hrsg.): Reflections on the International Association for Media and Communication Research: Many Voices, One Forum. Cham: Palgrave Macmillan, 2023</li> <li>- Bruhn Jensen, Klaus (Hrsg.): A Handbook of Media and Communication</li> <li>- Research: Qualitative and Quantitative Methodologies. London: Routledge, 2021</li> <li>- The Journal of Communication, Communication Research (CR), Social Media + society</li> </ul>		